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|-------------------------------|------------------------|---------------------|--|
| Notice of Allowability | Application No. | Applicant(s) | |
| | 10/643,624 | MORI, AKIHIRO | |
| | Examiner | Art Unit | |
| | NGOC V DINH | 2187 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 09102004.
2. ☒ The allowed claim(s) is/are 1-10.
3. ☒ The drawings filed on 19 August 2003 are accepted by the Examiner.
4. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☒ All b) ☐ Some* c) ☐ None of the:
 1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
6. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

- | | |
|---|--|
| 1. <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 5. <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 2. <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | 6. <input type="checkbox"/> Interview Summary (PTO-413), Paper No./Mail Date _____. |
| 3. <input checked="" type="checkbox"/> Information Disclosure Statements (PTO-1449 or PTO/SB/08), Paper No./Mail Date <u>08/18/03 10/18/04</u> | 7. <input type="checkbox"/> Examiner's Amendment/Comment |
| 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit of Biological Material | 8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance |
| | 9. <input type="checkbox"/> Other _____. |

DETAILED ACTION

INFORMATION DISCLOSURE STATEMENT

1. The Applicant's submission of the IDS filed 08/18/03 and 10/18/04 have been considered. As required by M.P.E.P. 609 C(2), copies of the PTOL-1449 are attached to the instant office action.

STATUS OF CLAIM FOR PRIORITY IN THE APPLICATION

2. As required by **M.P.E.P. 201.14(c)** acknowledgement is made of applicant's claim for priority based on an application filed October 15, 2002 in Japan.

Reasons for allowance

3. The primary reasons for allowance of claim 1 in the instant application is the combination with the inclusion of at least the limitation of "and a third control for making a logical volume identifier and a data set identifier for said first logical volume that are described in the management information in said first logical volume and a logical volume identifier and a data set identifier for said second logical volume that are described in the management information in said second logical volume match each other while said real-time duplication is being performed".

The primary reasons for allowance of claims 9 and 10 in the instant application is the combination with the inclusion of at least the limitation of "making a logical volume identifier and a data set identifier for said first logical volume that are described in the management information in said first logical volume and a logical volume identifier and a data set identifier for said second logical volume that are described in the management information in said second logical volume match each other while said real-time duplication is being performed; and means for executing said control program after interrupting said real-time duplication to make said second logical volume be recognized as being accessible by said operating system either as a logical volume independent of said first logical volume or as a data set independent of a data set within said primary logical volume".

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Because claims 2-8 depend directly on claim 1. These claims are considered allowable for at least the same reasons noted above.

Conclusion

4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.
- a. Thompson US 20040205391 discloses mirrored volume replication method and apparatus.
 - b. Yamagami et al PN 6836830 discloses method of logical volume data backup in a storage system.
 - c. Reed et al PN 6557089 discloses backup by id-logical volume.

Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Ngoc Dinh whose telephone number is (571) 272-4191. The examiner can normally be reached on Monday-Friday 8:30 AM-5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Donald A. Sparks, can be reached on (571) 272-4201. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 746-7239 for regular communications and (703) 746-7238 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (571) 272-2100.

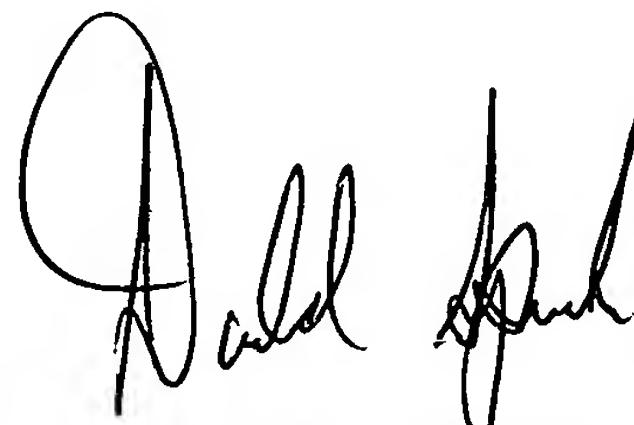


NGOC DINH

Patent Examiner

ART UNIT 2187

February 16, 2005



DONALD SPARKS
SUPERVISORY PATENT EXAMINER